

## IRRIGATION DESIGN

**Landowner** \_\_\_\_\_ **Dealer/Designer** \_\_\_\_\_

**Location** \_\_\_\_\_ **Acres** \_\_\_\_\_

**Resource Inventory on System** \_\_\_\_\_ (Pivot, wheeline, solid set, trickle, drip, etc)

**Soils** \_\_\_\_\_

Water holding capacity \_\_\_\_\_ in/ft      Soil depth \_\_\_\_\_ ft

Total available water \_\_\_\_\_ inches      Maximum soil intake rate \_\_\_\_\_ in/hour

**Crops grown** \_\_\_\_\_

Moisture extraction depth \_\_\_\_\_ ft      Net moisture applied \_\_\_\_\_ in/irrigation

Peak monthly use rate \_\_\_\_\_ in/month      Peak period use rate \_\_\_\_\_ in/day

Maximum irrigation frequency \_\_\_\_\_ days      MAD \_\_\_\_\_ %

**System information type and model** \_\_\_\_\_ (impact sprinkler, rotator, spray, etc)

Application efficiency \_\_\_\_\_ %      CU / DU \_\_\_\_\_

Gross application per irrigation \_\_\_\_\_ in      Net application rate \_\_\_\_\_ in/hr

Sprinkler spacing \_\_\_\_\_ ft on lateral      Sprinkler spacing \_\_\_\_\_ ft on mainline

Discharge \_\_\_\_\_ gpm/sprinkler      Nozzle size \_\_\_\_\_

Nozzle pressure \_\_\_\_\_ psi or \_\_\_\_\_ ft      Wetted sprinkler diameter \_\_\_\_\_ ft

Max lateral length \_\_\_\_\_ ft      Typical lateral length \_\_\_\_\_ ft

Max sprinklers per lateral \_\_\_\_\_      Typical sprinklers per lateral \_\_\_\_\_

Pressure loss in lateral \_\_\_\_\_ ft      Pressure loss in mainline \_\_\_\_\_ ft

Pumping suction lift \_\_\_\_\_ ft      Net gain or loss of elevation \_\_\_\_\_ ft

Miscellaneous friction loss \_\_\_\_\_ ft      Total dynamic head TDH \_\_\_\_\_ ft

System capacity \_\_\_\_\_ gpm      Efficiency of pump \_\_\_\_\_ %

Horsepower required \_\_\_\_\_ ft

### Pipe Installed

Size	Feet	Type	Pressure/schedule

- Pivot designs require, end gun info, sprinkler layout chart, % timer chart, degree of operation, and pressure at hub.
- Practice Standard attached.